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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,327	10/27/2003	Masaaki Matsutani	NAKAKURA.023AUS	3846

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EXAMINER
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TYSON, MELANIE RUANO

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/694,327	<b>Applicant(s)</b> MATSUTANI ET AL.	
	<b>Examiner</b> Melanie Tyson	<b>Art Unit</b> 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/27/03 &amp; 5/20/05</u>  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 31 October 2002. It is noted, however, that applicant has not filed a certified copy of the 2002-317310 application as required by 35 U.S.C. 119(b).

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bent portion formed at both ends of the grip (see claims 1 and 3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities: The first sentence of the abstract is incomprehensible. Also, on page 9, line 23, of the specification replace "through" with --though--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Petersen (Patent No. 6,500,187 B1).

Regarding claim 1, Petersen discloses a rod-shaped grip (Figure 2, element 11), a cutter holder (17) with a knife main body (13) detachably attached to a tip portion of the grip (by way of male portion 21 and female portion 23). Figure 3 shows a first bent portion (not labeled) formed at an end of the grip (adjacent element 21). The cutter holder (17) can be engaged from the inside and outside of the tip portion of the grip (outside of the tip portion via "bumps" 33 in Figure 12, and inside of the tip portion via

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the space between portions 29 and 31). Figures 3 and 6 show the angle between the grip (11) and the knife main body (13) is interchangeable (Figure 3 shows one orientation resulting in one angle, and Figure 6 shows a second orientation resulting in a second angle). The preamble "a blood vessel knife" is given limited weight. The device disclosed by Petersen is a scalpel (or "knife") and it is inherently capable of being used on a blood vessel.

Regarding claim 6, Petersen discloses the angle between the grip and the knife main body is between 0 and 10 degrees, and 10 degrees falls within the claimed range of "between 10 and 60 degrees" (Figure 17, element  $\beta$ ; column 6, lines 35-39).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen.

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Regarding claim 4, Petersen does not disclose a slit on the tip portion of the grip and an engagement portion on the cutter holder. However, Petersen discloses the tip portion (21) of the grip (11) is plate-like and is provided with a long hole (Figure 12, not labeled; portion between elements 29 and 31) and an "engagement portion" (bumps 33 and 35). Petersen further discloses the cutter holder (17) has a first engagement portion engaging the long hole (Figure 14; elements 29 and 31 are inserted through distal end 23 to proximal end 43; the center portion of 17, which is not labeled, is surrounded by the long hole thereby "engaging" the long hole) and a "slit" (Figure 15, recesses 45 and 47) at the tip portion (end 23) for inserting the "engagement portion" (bumps 33 and 35). Although the slit and engagement portions are reversed, they still provide the function of holding the cutter holder (17) and grip (11) together. It would have been obvious to one having ordinary skill in the art at the time the invention was made to put the slit on the tip portion of the grip (11) and the engagement portion on the cutter holder (17), since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art.

Regarding claim 8, Petersen does not disclose the distance from the bent portion (not labeled) to the knife main body (13). However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a distance of 3 cm between the bent portion and the knife main body, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

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9. Claims 2-3, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen in view of Taylor et al. (Patent No. 6,113,616).

Petersen discloses a device as described above. Regarding claim 2, Petersen does not disclose the device has a bent portion formed to the cutter holder. Taylor et al. disclose a surgical instrument for making precise incisions in a cardiac vessel. Unlike Petersen, Taylor et al. teach a bent portion (Figure 3, curved portion 4) formed to the cutter holder (where the "cutter holder" is element 7).

Regarding claim 3, Petersen does not disclose bent portions on both ends of the grip. Unlike Petersen, Taylor et al. teach a bent portion on both ends of the grip (9; top portion and bottom portion have bends) such that the bent angles are different from each other (bend in top portion of the grip is narrower than the bend in the bottom portion of the grip, therefore, the angles are different from each other).

Regarding claim 5, Petersen discloses an engagement portion for making press contact to a long hole and a slit as described above. Petersen does not disclose the cutter holder is provided with a bent portion. Unlike Petersen, Taylor et al. teach a bent portion (Figure 3, curved portion 4) formed to the cutter holder (where the "cutter holder" is element 7). Furthermore, since the engagement portion is formed at the end of the cutter holder of Petersen (see above), it would have been obvious to one of ordinary skill in the art to place the engagement portions at the end of the curved portion of the cutter holder if it were curved as taught by Taylor et al.

Regarding claim 7, Petersen does not disclose the cutter faces upward. Unlike Petersen, Taylor et al. teach the cutter (5) faces upward (see Figure 3 for illustration).

Taylor et al. disclose the instrument is configured to facilitate precise and substantially linear incisions (column 2, lines 30-32). Taylor et al. further disclose the instrument is configured to allow incisions to be rapidly made, precisely measured, and cleanly formed, resulting in less trauma to the vessel and require fewer manipulations of the vessel by the surgeon (column 2, lines 38-43). Therefore, to construct the device of Petersen with a bent portion formed to the cutter holder, bent portions on both ends of the grip, and a cutter that faces upward as taught by Taylor et al. would have been obvious to one of ordinary skill in the art at the time the invention was made in order to facilitate the use of the device and reduce the trauma imposed on the vessel during the procedure.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Thursday 7:30 a.m. - 5:00 p.m., alternate Fridays 7:30 a.m. - 4:00 p.m. EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.



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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson   
August 31, 2006

  
ANH TUAN T. NGUYEN  
SUPERVISORY PATENT EXAMINER

9/4/06